



The Arboretum Bulletin



VOL. V. No. 1.

SEATTLE, WASHINGTON

JANUARY, 1942

Apple Sale Report

THE Apple Sale this year has brought \$1,250.00 to the maintenance fund of the Arboretum. This is a small increase over 1940. The outbreak of war in the height of the buying season decreased the volume which the early sales promised, but 2,256 cartons were shipped for 525 buyers, all over the United States, to Canada, Alaska and Hawaii. Of these buyers 330 were in Seattle, 106 outside of Seattle but in the state, and 89 in states other than Washington. Among our buyers 94 were members of the Arboretum Foundation. There were 165 people who ordered in 1940 who repeated their orders, in many cases greatly increasing them in 1941. Our largest single order was for 175 cartons from a firm in the East and there were several others, also from the East, of like size. The sale has again publicized the state, its apples and its Arboretum. The Committee wishes to thank the members of the Foundation for their support.

1 1 1

Some Advantages of Cold Weather During the Dormant Season

By JOHN H. HANLEY

MOST gardeners are well aware of the important role played by cold weather in killing overwintering insect pests. Seldom, if ever, are insect populations completely eliminated by severe cold but there seems no doubt that they may become quite reduced in numbers by subjection to such conditions.

Entirely apart from this effect there is another very important role that cold weather can play. Temperate zone plants have been evolved over past ages of time under conditions which usually are marked by four distinct seasons. With some notable exceptions (bulbous species and desert species particularly) they have become acclimated to the impact of varying degrees of cold to the extent that it has become a near-necessity for the consummation of the normal yearly growth cycle. Many of our temperate zone types are *stimulated* by the cold of winter—stimulated to give abundant bloom and luxuriant growth. A classic demonstration of the value of a cold shock was made a number of years ago by a worker in the U. S. Department of Agriculture. By growing a blueberry plant close to a greenhouse he was able to train a branch through an aperture in the glass so that it extended well inside and was subjected to the warm interior temperatures during the whole of the winter season. In the spring the flowers and leaves on the branches which had been outside in the cold developed in perfectly normal fashion while the branch in the greenhouse did not, but lagged far behind.

It was this worker's idea that the low outside temperatures had stimulated the action of enzymes so that the stored, insoluble foods in the cells (starches in this instance) were made soluble and therefore available for normal growth. Many subsequent experiments have verified the findings.

So do not wail too copiously if the cold has killed one of your prize semi-hardy plant pets; just remember that it has been a much-needed stimulus for the vast majority of the species that you grow. The production of an abundance of flowers is dependent upon such a stimulus.

1 1 1

Lilacs

By MARY VIRGINIA GARDNER

Location: Sunshine—much less bloom if planted in the shade.

Time to Plant: Preferably fall, though they may be safely transplanted at any time.

Type of Soil: Circumneutral. They thrive in a deep, rich loam and respond wonderfully to applications of lime.

Type of fertilizer: Preferably cow manure which should, however, not be applied at same time as lime.

Time to Fertilize: In January they should have a heavy mulch of well-rotted cow manure. Soon after blooming they should have an application of garden lime (about four quarts to a large bush) worked well into the soil and then thoroughly watered.

Time to Spray and Type of Spray Material: January or early February with a miscible mineral oil spray.

Pruning: Pruning, if necessary, is better done right after blooming. Thinning out in order to prevent congestion is all that is needed. Young plants do not need pruning. Some old plants occasionally grow too tall, so that it is difficult to see the flowers. In such cases it might be well to prune out a few of the large old branches each year so that new and younger growth will be forced out from the base. Suckers from own-root plants should be encouraged and permitted by degrees to take the place of old branches. In order to prevent weakening the plant by the formation of seed, and also for the sake of appearance, all flower clusters should be cut out right after blooming, removing just the blossom stem but none of the new wood surrounding it, as it is on this new wood that next year's bloom appears.

Propagation: Lilacs may be grown from softwood cuttings, occasionally hardwood cuttings, from layers or from suckers of own-root plants. Cuttings will benefit by heat. Lilacs do not come true from seed.

Uses: Lilacs may be used for foundation planting, at the back of perennial borders, as specimens, as hedges, for massing, and for windbreaks.

Objections, if any: No objections.

Remarks: Own-root hybrid lilacs are by far the best. They are much hardier and therefore longer-lived and in addition have a much greater color range. The single-flowered varieties are generally considered more graceful and it is claimed they bloom more profusely. Deep planting of lilacs is important—as much as four or five inches deeper than nursery row ground-markings. This encourages thrifty plants and new shoots. The holes for planting lilacs should be large and deep—three feet in diameter and two and one-half to three feet deep. Incorporate a liberal quantity of well-rotted cow manure and a sprinkling of bone meal.

1 1 1

Violas

By CAROLINE BAMFORD

Location: Rock garden type half shade, other more sun.

Time to Plant: Early spring about March.

Type of Soil: Neutral or open soil.

Type of Fertilizer: Barnyard and commercial.

Time to Fertilize: Fall use barnyard or bone meal; spring, commercial.

Time to Spray and Type of Spray Material: Use insecticide for green fly or other insects in spring or when pests appear.

Pruning: Restrict plants to three growths, side shoots removed.

Propagation: Cuttings about three inches at joint in sandy medium.

Uses: Borders, rock plants and exhibition.

Objections, if any: None.

1 1 1

Home Propagation of Plants

THERE is still plenty of time to propagate many of your fine deciduous shrubs by means of hardwood cuttings. Select strong, healthy shoots, preferably of one-year-old wood, and cut them into pieces eight or ten inches long. Make the upper cut about one-half inch *above* a node or "joint"; the lower cut should be made one-quarter to one-half inch *below* the joint. Insert them deeply into a light, sandy soil so that only one or two buds are above the ground line and tamp the soil firmly about them. The spring rains will keep them moist enough for the new root system to form but be prepared to water them when the dry season comes. Some gardeners find it very convenient to use the clippings from the pruning operation to make these cuttings. It is surprising how easily many fine species can be increased by this method of hardwood propagation.

The following is a partial list of genera which can be handled by this method:

Akebia—Five-fingered Akebia	Diervilla—Weigela
Amorpha	Forsythia—Golden bells
Ampelopsis—Boston	Kolkwitzia—Beauty bush
Berberis—Barberry (deciduous)	Leycesteria—Leycesteria
Buddleia—Butterfly bush	Ligustrum—Privet
Callicarpa—Beauty bush	Rhus—Sumac (R. canadensis type)
Celastrus—Bittersweet	Ribes—Flowering currant
Cephalanthus—Buttonball	Sambucus—Elderberry
Colutea—Bladder senna	Sorbaria—Summer spiraea
Cornus—Dogwood—the shrubby forms	Syringa—Lilac
Corylus—Hazelnut	Tamarix—Tamarix
Deutzia—Deutzia	Viburnum—Wayfaring tree

For the colder parts of the state where hardwood cuttings could not possibly be planted in the open now because of frozen ground, they can be handled in a slightly different way with much success. If the pruning is done in February the branches can be cut into 8-10-inch lengths, tied in bunches of twenty-five, placed vertically in a box of sand and covered with three to six inches of sand above the uppermost end. Place the box in a cool cellar and do not let the sand dry out. Then plant the cuttings as above as soon as the soil can be worked in the spring. If proper storage conditions can be easily maintained it is possible to make these long hardwood cuttings in November and keep them in the sand box throughout the entire winter.

1 1 1

Magnolias

By PHEBE THOMPSON

Location: Sun—but somewhat sheltered from too much wind.

Time to Plant: Just when new growth is starting.

Type of Soil: Rich, moist, peaty loam.

Type of Fertilizer: Decayed leaves and peat.

Time to Fertilize: Spring.

Time to Spray and Type of Spray Material: Deciduous types may be sprayed early spring—miscible oil spray.

Pruning: Can be pruned in July if necessary.

Propagation: By seed—or grafted early spring or summer.

Uses: Deciduous types best planted among and in front of evergreens.

Remarks: M. Comp. all but in bloom now.

1 1 1

A Brief History of Gardening

American Colonial Gardens
(Concluded From December)

THE taste in gardening when they may first be said to have prevailed, was a direct inheritance from England. The earliest American gardens were inspired by a modification of the Elizabethan gardens. The work of Bridgman became the rage in England about 1720. He banished sculpture and did not ever resort to the square precision of the foregoing age. He enlarged his plans, disdained to make every division tally to its opposite, and though he still adhered much to straight walks with high clipped hedges, they were only his great lines; the rest he diversified with the wilderness and with loose groves of oak, though still within surrounding hedges.

This broader influence was greatly felt by the middle of the 18th century in America. Under this influence was the work of Washington at Mount Vernon, of which more is said later.

The Dutch who settled in the New World had come from a land where every square foot was precious, so the habit of thrift in the use of land was strong upon them. They preferred to live in a town, although they had extensive lands. However tiny the space was around the house we may be sure that there was a garden, which was kept in good order. All had their beds of tulips and certain other flowers inseparable from the Dutch and their flat, toylike land.

Although much that is popularly cherished with regard to gardening in the New World centers around this section, it is, as a matter of fact, more barren in some respects than any other. The inhabitants of this section were on the whole poor country folk. They were simple rustics of a little English village, all of them strangers to the finer arts and graces of living. Every one had to work and to work hard, for a bare living. The Puritans did not allow themselves to garden for pleasure, so it is little wonder that there is no reference to gardens other than economic gardens. Governor Winthrop is said to have had a garden, but it is probable that there were few flowers even there. The gardens were lacking in design because it would have suggested the old ritual and the ones who practiced it, which they hated. Governor Endicott is said to be responsible for the introduction of the white ox-eye daisy into this country, and from his dooryard in Salem the east wind has carried it across the meadows of the entire land.

By the middle of the 18th century the gardens developed into something a little more like definite form and beauty. Dooryards in the town were tiny enclosures before the front door, fenced in from the corners of the house with white palings, and within the modest enclosure were planted the old-time tulips, jonquils, gilliflowers, bell flowers, poppies and lily-of-the-valley. The marigold lived behind the house and handy to the kitchen.

There were few larger places of note. The Bromfield mansion, built in 1722 on Beacon Hill, was one of the earliest. It had a paved courtyard behind, with terraces beyond and above it, and with a summer-house at the hill's summit. The terraces were filled with flowers and fruit trees, and the summer-house commanded a view of the harbor and all that lay beyond.

There are traces of all styles and periods to be found in the gardens which marked the division between the colonies of the north and those of the south.

The great places in Maryland were naturally located on the waterways. The gardens were very similar to those of Virginia.

When Penn came to his colony he found a Swedish governor already established who had made fine orchards and gardens, although the gardens were mainly for vegetables. Penn had an area consisting of over 6,000 acres which he intended to use as his country seat, for he never intended living in a city. The mansion, when completed, stood about 70 yards from the river along which the manor lay. It was of brick, 70 feet long and 40 feet deep, with a garden sloping away in front of it. The offices were separated from the house by means of a forecourt 40 feet wide. In front of the mansion, near the river, was a triple row of walnut trees, and a poplar-lined walk was below the steps to the water.

The city which Penn planned so carefully was laid out immediately upon his arrival in 1682, and a year later there were at least 300 houses built. The least of the houses had room for a house garden and a small orchard. Another city was planned and laid out at Germantown for the Germans, who were present in large numbers. The principal street was made 60 feet wide with a cross street 40 feet wide.

A famous place of the next generation, on the road from Philadelphia to Darby, was "Woodlands", begun in 1734 by Andrew Hamilton. Its entrance gateway was flanked by two splendid lodges; the grounds about the mansion were large, and the gardens abounded in rare and foreign

trees and luscious fruits and exquisite flowers. The natural style was by this time quite the rage, and "Woodlands" was probably the best example of it that this country possessed at the close of the 18th century.

The first botanic garden in America was planted by John Bartram at his farm on the banks of the Schuylkill. His farm was as remarkable as his garden, for he irrigated the land by a system which he originated. The China aster, so popular in this country today, was brought here by him.

Gardens of great beauty came rapidly into existence after the fashion had been set by the building of Pennsylvania. No style of design prevailed; but a sweet and restful homeliness prevailed, whatever the design. Quiet and tranquillity lay at their hearts, and quiet and tranquillity were reflected in their homes, indoors and out.

It is a peculiarly fitting and happy circumstance that the history of old-time gardening in America should come to a close with the magnificent estates of two such Americans as our first and our third Chief Executives.

Mount Vernon was the estate of Washington's father, and at his death in 1743, it passed to Lawrence Washington, the elder half brother of George. The name was given by Lawrence, who named it after his friend and commander, Admiral Vernon. Lawrence died in 1751 and the estate then became George's property. It was his purpose and delight that every part of the place should be kept with the utmost neatness. It was during the time from 1783 to 1789 that Mount Vernon was created as it is today. According to his nature, the proportions were so splendid and the planting so skillful, that there is none of the oppressiveness against which those who were railing at formalism and stripping their gardens of it, complained.

Monticello was not in existence at the time when Jefferson was born, but it is built on one of the hills, Shadwell, of his father's estate. It was in 1766 that Jefferson first started to take notes on everything that pertained to the garden. Why he decided to have a house of his own is not known, for he fell heir to his boyhood home when his father died. He placed his house on the top of the sugarloaf mountain where he had cleared a magnificent space. Jefferson, himself, designed the house, and it is different from any other southern mansion in that the kitchen and "rooms for all sorts of purposes" were beneath the house and partly formed the terraces on one side.

The kitchen garden was made during the time that Jefferson was President, and this must have been a tremendous task, for the rock had to be blown out for the walls of the different terraces and the earth brought in to nourish the plants.

Broad lawns, fine trees, flowers and shrubbery of rarity and beauty, and a great park reputed to be 300 acres in extent all about the house, which was enclosed and protected and wherein no tree was ever cut, but where roads and paths wound through, intersecting and furnishing the most delightful walks and drives—these were the characteristics of Monticello, rather than any limited gardens or garden.

He chose his shrubbery and flowers so that there was continual bloom from spring through fall. He kept very close watch of all his plants, and above all liked to introduce something new which was not to be found in America. He gave much attention to the beautifying of his grounds, even while he was President of the United States.

(The End)

RETURN POSTAGE GUARANTEED

THE ARBORETUM BULLETIN
Published by the
Arboretum Foundation, 5532 White Building
SEATTLE

Sec. 562 P. L. & R.